DURACUBE-500

Portable Power Station

User Manual

GP-DURACUBE-500



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Worldwide Technical Support and Product Information gpelectric.com
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GP-DURACUBE-500 User Manual.v2

Congratulations on purchasing your Go Power! DuraCUBE Portable Power Station.

Before you use or store this product, please ensure it is fully charged. Please read this manual in full before using the product.

The DuraCUBE produces the same potentally lethal AC power as your household outlet. Please ensure you use carefully, as you would with an outlet on the wall at home.

- DO NOT insert foreign objects any ports or ventilation holes.
- DO NOT open the enclosure or attempt to repair or replace the battery.
- DO NOT operate in wet conditions.

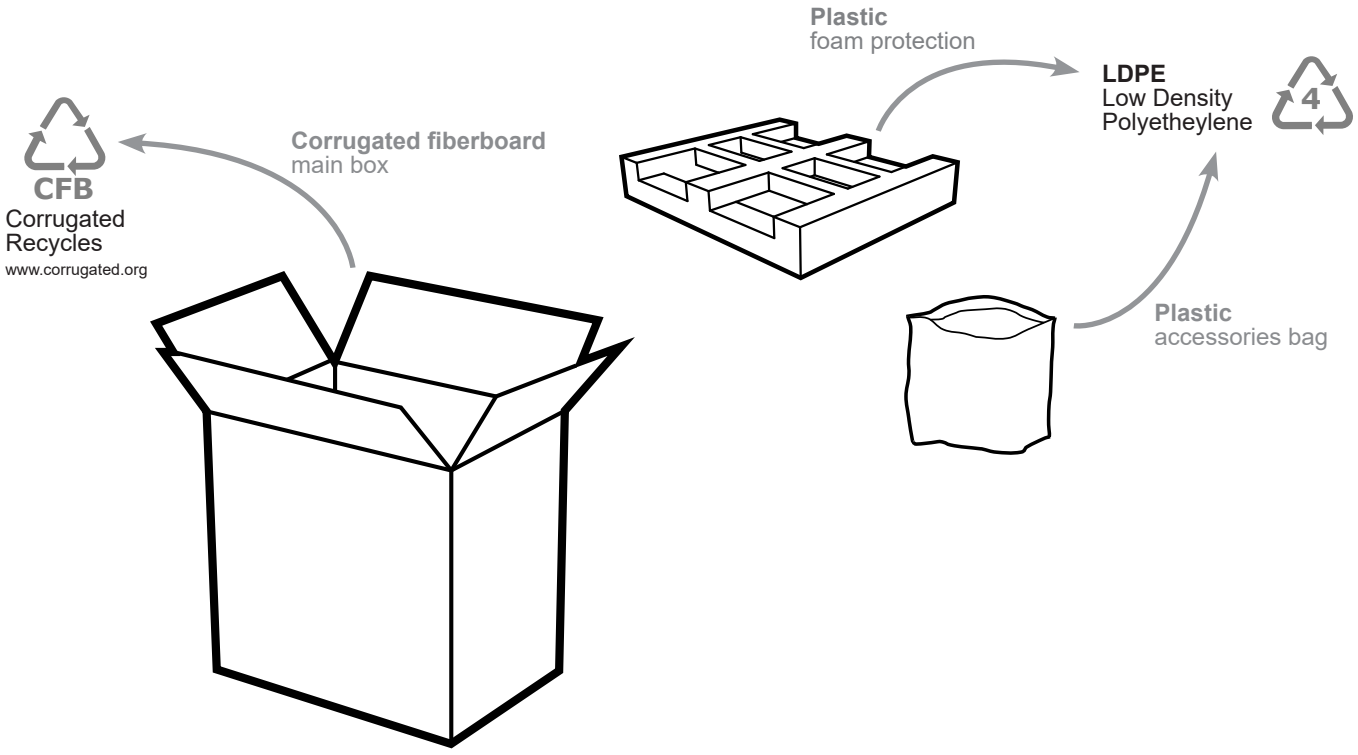
To avoid electric shock or damage to the product do not allow it to get wet. If it does get wet, let it dry completely before using. This product presents a shock anbd fire hazard and should be handled with care.

Any manipulation or misuse of this unit or its components will void all warranties.

Refer to the SAFETY section of this document for a complete list of precautions and potential hazards.

Product Packaging

Please safely store the packing the product was delivered in or recycle the packaging components as outlined below:



Local recycling centers can be found here:
www.earth911.com/recycling-center-search-guides

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2.1 SPECIFICATIONS

	DURACUBE-500
Capacity	537.6Wh (168,000mAh)
Maximum Solar Input	Max 120W (5V-24V)
Solar Controller	120-Watt MPPT
Dimensions	9.84 x 7.48 x 7.48 in (25 x 19 x 19 cm)
Weight	18.7lb (8.5 kg)
Case Material	Anodized, Aircraft-Grade Aluminum
Battery Type	Lithium Iron Posphate (LiFePO4)
Input Type	2x DC Ports
AC Output	2x Ports (Pure Sine Wave)
DC Output	1x Port
Type-C Output	1x Port dcto PD 18W
USB Output	4x Ports: 5V – 3A / 9V – 2A / 12V – 1.5A Max 18W shared on 2x ports (Supports Quick Charge 3.0)
Limited Warranty	2-year

2.2 BOX CONTENTS

Power Station	1 pc.
Exclusive Charger	1 pc.
Instructional Manual	1 pc.
Jump Start Clamp	1 pc.
Solar Charger	SOLD SEPARATELY

3. SAFETY

3.1 PRECAUTIONS

1. The onboard LiFePO4 battery requires safe handliung during operation, storage, and delivery.
2. Recharge only with the charger provided by Go Power!. A charger that is suitable for one type of battery pack may cause a risk of fire when used with another charger.
3. Charge the product in a well-ventilated location. Do not put this product in water, or use unnecessary force when operating.
4. Keep this product and related accessories in a safe place, not accessible by children.
5. Do not expose it to sources of heat or ignition to avoid a potential fire and/or explosion.
6. Avoid inserting foreign objects into the charging/discharging sockets or ventilation holes, as this could cause a short circuit and/or personal injury.
7. Do not disturb the fan while it is in operation. Inadequate ventilation may cause damage to the unit.
8. Do not stack anything on top of the unit while in storage or in use.
9. Do not disassemble, crush, heat the unit above 40°C, or incinerate doing so risks fire, explosion and/or personal injury.
10. Inspect the product for dirt, dust, and moisture regularly.
11. This power station generates the same potentially fatal AC power as a wall outlet at home. Please use it carefully.
12. Any repair must be carried out by the manufacturer or an authourized repair agent in order to avoid any danger.
13. Do not attempt to replace the internal battery.

ANY MANIPULATION OR MISUSE OF THIS UNIT OR ITS COMPONENTS WILL VOID ALL WARRANTIES.

3.2 WARNINGS

	**This unit IS NOT weatherproof**	Never leave this product unattended, or subject to inclement weather.
	**Observe caution while connecting**	Electricity can be very dangerous. Take appro-priate caution when making connections.
	**Battery and wiring safety**	Observe appropriate safety precautions when handling or working around batteries.
	**Wiring connections**	Ensure all connections are tight and secure. Loose connections may generate sparks and heat. Be sure to check all connections regularly.
	**Observe correct polarity**	Reversing polarity of the any plugs will cause the unit to give a warning tone. The unit will not function unless connections are made with proper polarity. Failure to correct polarity could damage the internal components.
	**Do not exceed the Charge Controller current and voltage ratings**	Refer to charging section for more details.

4.1 GENERAL INFORMATION

This power station is made up of a rechargeable LiFePO4 battery, pure sine wave inverter and built-in battery management system (BMS) as well as a 120-watt MPPT Solar Controller. It supports AC and DC input charging by power source and solar power. It can also discharge via AC and DC in addition to the car start function, to keep you powered while on the go.

Ideal for any outdoor adventure, including camping and tailgating, as well as during emergency situations and power outages.

4.1.1 USE EXAMPLES

USB Port: Smart Phone, MP3 Player, Digital Camera, Tabler, E-Reader (most handheld devices)

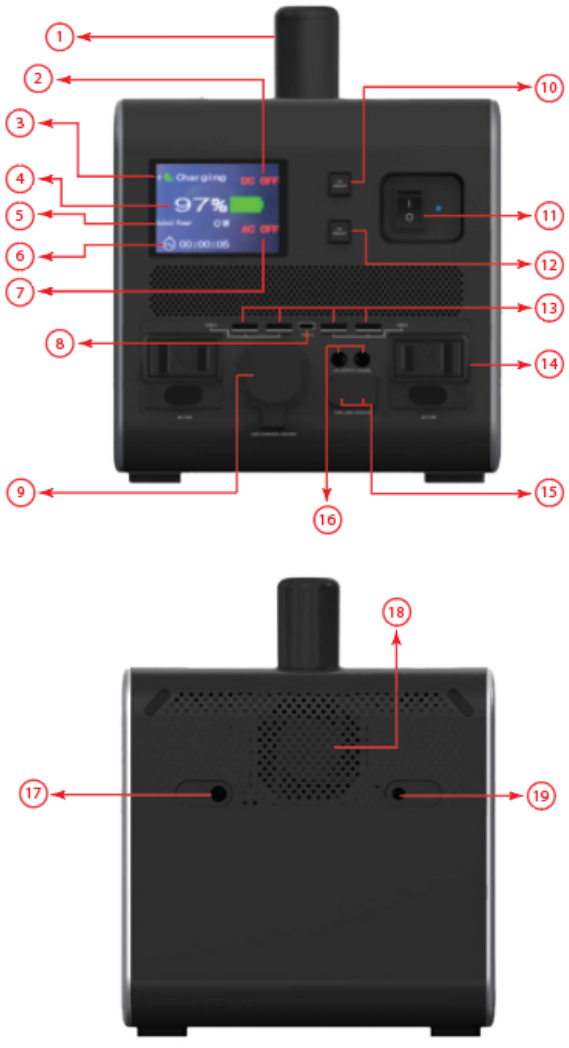
v DC 12V Output Barrel Ports: LED lights, or other electronics with DC barrel connections

DC 12V Power Socket: 12v coolers or fridges, 12V applicances, etc.

AC Output Port: TVs, Laptops, , etc.

NOTE: Only use appliances with power draws that are less than the device's continuous output power (500 watts)

4.2 PORTS AND SCREEN



NO.	DESCRIPTION
1	Carry Handle
2	DC ON/OFF Status
3	Charging Indicator
4	Remaining Capacity
5	Total Output power
6	Operating time
7	AC ON/OFF Status
8	Type-C output port
9	DC 12V cigarette port
10	DC ON/OFF
11	Main Power switch
12	AC ON/OFF
13	USB output port
14	AC output port
15	12V car start output port
16	DC 12V output port
17	AC & Solar Charging Port
18	Cooling fan
19	DC charging port Cigarette Lighter Adapter sold seperately.

5.1 USING THE POWER STATION

a. Click the Main Power Switch up (11) to turn the power station on. The LCD indicator light next to the switch will light up.

b. Press the AC ON/OFF (12) button to turn on the AC port. The AC ON/OFF Status (7) will show on the LCD display once it is activated.

c Press the AC ON/OFF button (12) again to turn it off when not in use. AC OFF (7) will be displayed on the LCD screen.

e. Press DC ON/OFF button (10) to turn it on. The DC status (2) will show on the LCD display once it is activated.

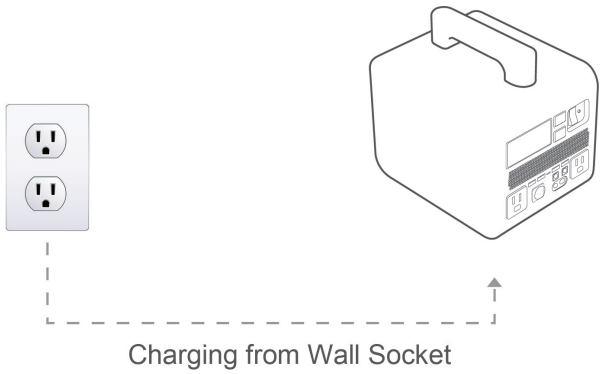
f. Connect one end of the cable to any DC port (USB-A (13), Type-C (8), DC power socket (9), DC barrel/round port (16) or 12V jump-start port (15), and connect the other end of the cable to your equipment.

5.2 CHARGING YOUR POWER STATION

5.2.1 AT HOME

Charging with an AC Cable

- Plug the charging cable into a wall outlet, then connect the other side ot the AC Input Port (17) of the portable power station. You will see the charging state (3) in the LCD display if connected properly.

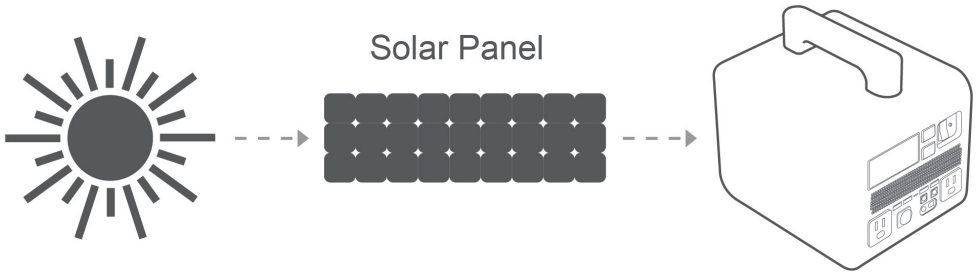


Note Only recharge with the charger cable supplied by Go Power!.

5.2.2 WITH SOLAR

Charging with an optional solar panel (Max Charging Power - 120W)

- Place the solar panel in direct sunlight
- Connect the solar panel with the solar charging cable. Plug the cable into the solar charging port (17) on the side of the portable power station. You will see the charging indicator on the LCD display (3).
- The integrated solar charge controller will stop charging when the battery is fully charged.



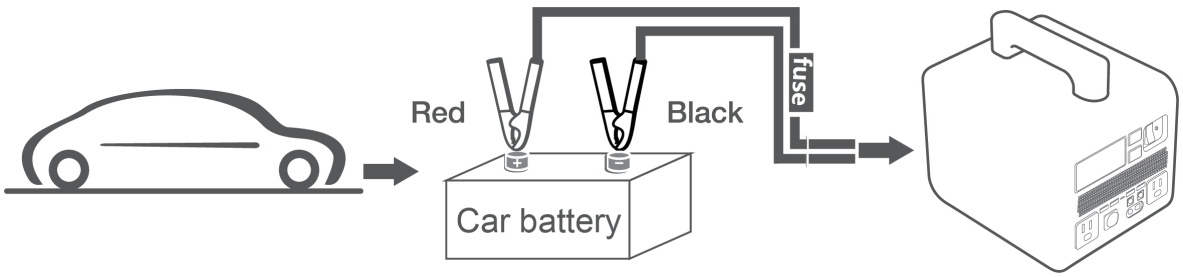
Note Solar input should not exceed 22v. Go Power! recommends using a DuraLite Expansion Panel to charge the DuraCUBE.

5.3 VEHICLE JUMP STARTER

Jump start function applicable to engines 2.0L or smaller. For larger engines, affix the battery clamps and trickle charge the vehicle battery for 30 minutes before attempting to turn over the ignition.

Ensure the battery power is over 60%

- Before starting the vehicle, ensure the red and black clamps are clamped tightly to the battery terminals of your vehicle. Plug one end of the EC5 connector with battery clamps into the jumper port (15) of your power station.
- Connect the positive and negative polarities of the batter clamps to the positive and negative polaritied of the vehicle battery (Red to + ; Black to -)
- Turn the key to turn over the vehicle's ignition.
- Disconnect the clamps from the battery and the jump start port of your power station.



Note

1. Remove all personal jewelry, such as rings, bracelets, necklaces and watches before using the jump-start feature.
2. Please keep away from the engine when starting the vehicle to avoid any physical injury that may be caused by the engine running.
3. Remove the clamps from the battery within 30 seconds after the engine has started to avoid any potential damage to the portable power station.
4. Use this feature with extreme caution and do not use it if you feel uncomfortable operating this feature.

5.4 COMPATIBLE DEVICES

The DuraCUBE is compatible with a number of electronic devices. There are a few steps to take in order to determine if your appliance or device is compatible with this portable power station.

First, you will need to determine the amount of power your electronic device requires. This should be found in the user manual that came with your device.

Second, you will need to check the capacity of the individual ports. For example, the AC port of the GP-DURACUBE-500 is monitored by an inverter to allow for 500W of continuous power. This means that if your device is pulling more than 500W for an extended period of time, the portable power supply will shut off.

Note

1. When the power is lower than 10%, the battery level symbol turns from green to red
2. When the power level is lower than or equal to 5%, the battery level symbol will begin flashing red.
3. When the power is lower than 1%, both the AC and DC outputs will stop working. Turn off the main power switch (11) to protect batteries in this state.
4. If possible, keep your power station fully charged before long-term downtime.
5. Fully charge your power station every 6 months to keep the battery healthy.

6.1 OVERLOAD

When the output power is greater than the continuous power (500W), this product is capable of, an alarm will sound and the word OVERLOAD will be displayed in the LCD screen. Reduce the power draw from the electronic devices connected. If the AC Output is turned OFF, press the AC ON/OFF button to restart the power station.

6.2 HIGH TEMPERATURE

When the the internal temperature is higher than 35°C or the output power is greater than the continuous power (500W), the cooling fan will kick in. When the internal temperature is higher than 80°C, the temperature alarm will sound. The AC and DC outputs will shut off and the LCD screem will display HI TEMP. You will need to wait until the internal temperaturedrops below 40°C to restart.

7. STORAGE & DOWNTIME MAINTENANCE

Prolong the life of your DuraCUBE by storing it properly. Failure to properly store the DuraCUBE can result in damage to the battery, voiding the product warranty.

1. Fully charge your power station before storing store it in a cool, dry place.
2. Recharge it every 6 months for optimal performance.
3. If the main power supply shuts down automatically because of lower battery capacity, recharge it as soon as possible to maintain the battery capacity.

Note

Cold temperatures (below freezing) can impact the battery capacity of the power station. If you are living in sub-zero conditions, this ambient cold can drain power from the battery.

Never charge it in sub-zero conditions, which may damage the lithium battery and the battery capacty will decrease.

8. SUPPORT

8.1 FREQUENTLY ASKED QUESTIONS (FAQs)

What can the DuraCUBE-500 Power?

This unit can power any 120V electronic device, or a combination of devcices, with a continuous output power of 500W or less.

Can I charge the DuraCUBE while powering my devices?

Yes, the DuraCUBE features a passthrough function that will allow you to charge and discharge simultaneously.

What kind of solar controller is built in?

This unit features an internal 120-watt MPPT solar charge controller, which maximizes the solar power input for faster charging.

Can I keep it plugged in while in storage?

Yes, you can keep it plugged in while in storage.

8.1 FREQUENTLY ASKED QUESTIONS (FAQs - continued)

Is the battery replaceable?

The internal battery is not replaceable. Any attempts to access or alter the internal components will void the warranty.

What type of battery is inside?

The DuraCUBE features a Lithium Iron Phosphate battery. This battery type is more stable than Lithium Ion and lasts up to 4x as long.

Can I travel on a plane with the DuraCUBE?

No, this battery type is not allowed on passenger aircraft.

8.2 TROUBLESHOOTING

DuraCUBE not charging with AC

Check the connections of the charging source to ensure they're fitted properly. Inspect the port for dirt, dust, or debris and clear out if necessary. Ensure it's the one included with the DuraCUBE.

DuraCUBE not charging with Solar

Make sure the panel is connected properly and placed in full sun. Inspect the panel for dust or shading, and clear the panel of dirt, dust, or debris. Make sure the port is also clear of dirt, dust, or debris. To maximize power generation, move the panel throughout the day to orient it to the sun's location.

The solar panel will collect power even in overcast conditions, though the efficiency will decrease in couldy conditions.

No power output

Ensure the DuraCUBE is charged to more than 5%. Check to see if power type (AC/DC) is turned on and the LCD screen reads AC/DC ON. Turn the main power switch off and back on again and retry the required output.

If problems persist, contact Go Power! Technical Support at techsupport@gpelectric.com.

9. LIMITED WARRANTY

Go Power! warrants the GP-DURACUBE-500 for a period of five (5) years from the date of shipment from its factory. This warranty is valid against defects in materials and workmanship for the five (5) year warranty period. It is not valid against defects resulting from, but not limited to:

- Misuse and/or abuse, neglect or accident
- Exceeding the unit's design limits
- Improper installation, including, but not limited to, improper environmental protection and improper hook-up
- Acts of God, including lightning, floods, earthquakes, fire, and high winds
- Damage in handling, including damage encountered during shipment

This warranty shall be considered void if the warranted product is in any way opened or altered. The warranty will be void if any eyelet, rivets, or other fasteners used to seal the unit are removed or altered, or if the unit's serial number is in any way removed, altered, replaced, defaced, or rendered illegible.

9.1 REPAIR AND RETURN INFORMATION

Visit https://gpelectric.com/support/ to read the "frequently asked questions" section of our website to troubleshoot the problem. If trouble persists:

1. Fill out our online Contact Us form or Live Chat with us
2. Email techsupport@gpelectric.com
3. Return defective product to place of purchase

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